

### Abstract of the Disclosure

Antigenic peptides may be isolated from a limited quantity of cells or bodily fluid from a mammalian organism in an amount sufficient to determine their sequence and identity. Therefore this invention relates to methods for identifying novel disease-associated antigens, e.g. tumor antigens and antigens involved in autoimmune diseases, to be utilized for diagnostic or therapeutic purposes. The methods of the present invention can also be utilized for controlling the quality of vaccines. More specifically, the methods of the invention can be used for determining the sequence of antigenic peptides presented via peptide receptors of dendritic cells which are the most important antigen presenting cells of the body and valuable tools for vaccination.

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